

Initiative 80 – Seattle Creek Restoration Summary of Requirements and Implications

Initiative 80 would do the following:

Establish restoration and protection requirements for any stream or watercourse in the City that: a) flows year round; and/or b) potentially supports salmonids; or c) historically supported salmonids; and d) is not limited to 26 listed creeks and their tributaries. Restoration includes, but is not limited to:

- daylighting piped stormdrains/culverted creeks and historic creek corridors;
- removing fish passage barriers on or adjacent to public and private property;
- establishing minimum 50' creek buffers and wetland areas within the buffers;
- planting native vegetation; and
- education and outreach to creekside property owners.

Require “major creekside developments” (e.g. over ½ acre) to restore surface and buried creeks (e.g. stormwater pipes/culverts connected to creek systems and historic creek corridors) existing on their property or in the adjacent public right-of-way to the property (if creek’s channel was on their parcel at any time prior to being moved). Requirement applies regardless of vested rights.

Prohibit any future development over buried or surface creeks, adjacent to creeks and within historic creek corridors.

Require the City to protect and restore surface and buried creeks on all public property.

Require the City to restore creeks on private property where the City has failed to enforce Initiative requirements on private land development.

Require the City to compensate private property owners where Initiative requirements result in an unconstitutional taking.

Require the City to eliminate pesticide, fungicide and herbicide use on all City properties within 200' of creeks.

Require the City to develop, fund and implement a long-term creek restoration plan.

The Initiative would restore over 1/3 of the roughly 92.6 miles of open, piped and historic creek channels in Seattle. Restoration requirements would apply to parcels representing 15.6% to 16.7% of the land area in the City. The Initiative’s direct fiscal implications range between \$569 million to \$26.1 billion depending upon how broadly the Initiative’s property effects are interpreted¹ and assumptions about cost.² The Initiative’s public sector financial effects are estimated in the range of \$504 million to \$21.6 billion. For the private sector that range is between \$65 million to \$4.5 billion. The Initiative will affect private developments at Northgate, Rainier and McClellan and University Village among other areas and it will specifically affect up to 453 public and non-profit held parcels -- 58% of which are in City ownership and 8% in Port of Seattle ownership. *Tables 1-5 and Maps 1-7* provide more detail.

¹ A broad interpretation of the Initiative’s property effects includes all ½ acre+ public and private parcels with surface creeks, piped/culverted “creeks”, historic creek corridors on them (and ½ acre+ parcels directly adjacent to these that may have buffer/fish passage requirements) as well as ½ acre+ parcels along the Duwamish watercourse. For purpose of this analysis, a 1894 USGS map was identified as one basis for identifying historic creeks. However, for purposes of regulation, the City might consider additional information to identify historic creek corridors. A narrow interpretation of the Initiative’s property effects excludes all single family zoned parcels in private ownership from Initiative requirements.

² See Table 5.

Table 1
Requirements – Private Property Owners, General Public and Businesses

	Property Owners	General Public	Business
Regulatory Requirements	<p>Major creekside developments required to restore creek on or adjacent to development site.</p> <p>Restoration shall include: planting native and removing invasive vegetation, establishing wetlands/detention in buffers, removal of fish passage barriers, daylighting creeks flowing thru pipe/culvert 50' or greater (exclusive of r-o-w crossings) on at least 26 named creeks in the city.</p> <p>To be exempt from requirements owner must prove: a) restoration would result in insufficient area/flow for juvenile salmonids; and b) so much downstream is piped that will never be accessible to salmonids.</p> <p>Future development prohibited over creeks or their buffers.</p> <p>Future development prohibited over a creek's historic corridor , if requested by the parcel owner, an alternative corridor provided on the same parcel.</p> <p>Restoration requirements apply regardless of vested rights.</p>		
Procedural Requirements	<p>Major creekside developments required to submit creek restoration plan as part of building application.</p> <p>Creek restoration plan must include City approved engineering plan for conducting restoration concurrent with development.</p> <p>Developer should agree with City upon ownership and maintenance responsibilities for restored creeks.</p> <p>Wherever possible, restored creeks should be transferred to public ownership.</p> <p>Private exemption requests must submit creek restoration plan with written opinion from WDFW certifying exemption standard is met based on best available science.</p> <p>Development applications shall vest only upon submission of creek restoration plan, stormwater mgmt plan, and plan for complying with Env. Laws, and other requirements. This applies notwithstanding issuance of previous approvals.</p>	<p>Standing to seek enforcement of Initiative by mandamus or other action.</p> <p>Exemptions appealable to City Hearing Examiner and thereafter Superior Court.</p> <p>May recover reasonable costs and attorneys' fees incurred in taking successful action against the City.</p> <p>May comment on Long-term Creek Restoration plan.</p> <p>May comment on building applications for major creekside development including creek restoration plan and application's consistency with Initiative.</p> <p>May comment on exemption requests.</p>	
Financial Requirements	<p>Pay cost of creek restoration on property including daylighting, required plans, opinions, etc.</p> <p>Required to assist in funding the City Creek Restoration Account.</p>	<p>Additional direct costs incurred no greater than \$1.3 Million/year to City Creek Restoration Account</p> <p>(\$5/year x 258,499 Households in the 2000 Census)</p>	<p>Required to assist in funding the City Creek Restoration Account.</p>

Table 2
Requirements – City Departments and Other Public Institutions and Property

	City (general)	DCLU	SPU	Parks	Other Public
Regulatory Requirements	<p>Phase out pesticide, fungicide, herbicides use on all City owned land within 200' of creeks (w/in 18 mo).</p> <p>Daylight creeks on public property (w/in 20 yrs)</p> <p>Require property owners to restore habitat, daylight creeks and/or remove fish barrier(s) during major creekside development. Or, after giving required notice, carryout the same and bill the property owner.</p> <p>If fail to enforce creek restoration requirements on major creekside developments, restore creeks concurrent with those developments.</p> <p>To be exempt from requirements City must prove: a) restoration would result in insufficient area/flow for juvenile salmonids; and b) so much downstream is piped that will never be accessible to salmonids.</p>	<p>Adopt regs to reduce stormwater pollution and impacts to creek ecosystems. (w/in 18 mo)</p> <p>Update creek protection regs inc. critical areas ord, shoreline master program (w/in 18 mo)</p> <p>Develop regulatory framework for daylighting on private property.</p> <p>Grant no development approval inconsistent with the following:</p> <ul style="list-style-type: none"> - Prohibit any future development over creeks or their buffers. - Protect the opportunity to restore the creek by prohibiting any future development over the creek's historic corridor or, if requested by the parcel owner, an alternative corridor on the same parcel. <p>Require exemptions for major creekside development to be appealable to the City's Hearing Examiner and thereafter Superior Court.</p> <p>Enact new vesting rule whereby applications for major creekside development shall vest upon submission of fully complete applications at a minimum complying with RCW 19.27.095, Section 106 SBC, and including creek restoration plan, stormwater mgmt plan, and plan for complying with Env. Laws notwithstanding issuance of previous approvals.</p>		<p>Phase out pesticide, fungicide, herbicides on Parks land within 200' of creeks (w/in 18 mo)</p> <p>Daylight creeks on Parks property (w/in 20 yrs)</p>	<p>Work with city to daylight creeks on public property (w/in 20 yrs)</p> <p>Not specifically listed as eligible for exemption provisions.</p>
Planning Requirements	<p>Adopt long-term creek restoration plan (draft/final – 12 month)</p> <p>Prepare supplemental Comp Plan EIS</p> <p>Pursue joint planning and info exchange with jurisdictions sharing resp. for City creeks.</p> <p>Study new revenue sources to fund Creek Restoration Account (w/in 6 mo)</p>				
Procedural/ Programmatic Requirements	<p>Conduct public meetings for long-term creek restoration plan.</p> <p>Determine whether restoration done by building applicant for major creekside development happens under City supervision or as a City effort funded by applicant.</p> <p>Agree with developers upon ownership and maintenance responsibilities for restored creeks.</p>	<p>Develop framework and process for special review and conditioning of major creekside developments</p> <p>Ensure development potential on private sites not lost due to restoration and grant open space credit.</p>	Coordinate major creekside development restoration efforts		

	<p>Wherever possible, transfer restored creeks to public ownership.</p> <p>City exemption requests must submit creek restoration plan with written opinion from WDFW certifying exemption standard is met based on best available science.</p> <p>Exemptions review – If WDFW unavailable for opinions, City may designate another non-city agency with sufficient expertise.</p> <p>Solicit public comment on exemption requests.</p> <p>Provide education and outreach to creekside property owners (re; creek riparian function, bmps)</p> <p>Codify Initiative in new chapter of SMC.</p>				
Financial Requirements	<p>Maintain City's current creek restoration at existing program levels. (approx avg \$4.0 M/yr)</p> <p>Fund long-term creek restoration plan, supplemental EIS and related funding study.</p> <p>Adopt funding mechanisms and create a City Creek Restoration Account to fund costs of the Initiative including. (w/in 3 mo of completed funding study).</p> <ul style="list-style-type: none"> - Accelerate creek restoration and daylighting on all public property. - Fund plan and implementation strategy for phasing out pesticides, etc. use on all public property. - Contribute to private projects to extent needed to avoid constitutional taking of private property. - Create incentives for restoration, consider purchase of creek corridor and/or provide loan financing, grants or other valuable benefit (e.g. density bonuses), as appropriate. - Provide education and outreach - Provide staffing to implement Initiative requirements. <p>Pay applicable costs and fees incurred by parties successful at bringing action to enforce the Initiative.</p> <p>May obligate city to provide full funding to implement plan which might incur other city fund sources.</p>	Provide staffing to ensure special review and enforcement.			Required to assist in funding the City Creek Restoration Account.

Table 3
Summary Table City-wide Property Effects

	Broad Interpretation	Narrow Interpretation
% of Total City Area	16.7%	15.6%
Number of Parcels	1063	728
Total Acreage	8716	8139
Public Property Total	453 parcels / 7205 acres 43% parcels / 83% acres	453 parcels / 7205 acres 62% parcels / 89% acres
City only	261 parcels / 4423 acres 24% parcels / 51% acres	261 parcels / 4423 acres 36% parcels / 54% acres
Private Property Total	610 parcels / 1511 acres 57% parcels / 17% acres	275 parcels / 934 acres 38% parcels / 11% acres

Table 4
Site Specific Property Effects

Specific Site	Initiative Requirements	Practical Considerations
Rainier and McClellan (map 6)	<ul style="list-style-type: none"> Public properties (e.g. UW Hospital Laundry) with a historic stream corridor underneath them would be required to pay for daylighting and restoration of that corridor with minimum 50' buffers. Public properties would be responsible for maintenance Concurrent with development, private property owners required to daylight historic stream corridor on their property and restore as creek with minimum 50' buffers. Private property owner will be responsible for paying for restoration on private property. Private property will work out maintenance and operation issues for creek on private property with the City. If feasible, restored creek on private property would be transferred to public ownership 	<ul style="list-style-type: none"> It will probably be difficult to ascertain and agree to where the historic creek channel may have run on the properties if at all. The underground storm drain system in the vicinity is likely to offer little clue. Patchwork daylighting requirements applied parcel to parcel in this area (so far from the receiving water body) may not result in a functional stream corridor. It is unclear whether if the creek bed was recreated it could function as a continually flowing creek (appropriate groundwater table, enough surface water input) vs. being just a ditch. The restored alignment of the creek and related buffer development from parcel to parcel might impact development potential and result in buffer requirements for adjacent properties such as the Child Protective Services Agency. Restoration of historic creek corridors in this vicinity could interfere with set alignment for South Transit.
West Seattle Golf Course (map 7)	<ul style="list-style-type: none"> City/Parks required to restore ½ a mile of existing and piped creek running through the West Seattle Golf Course. Requirements would include: planting, daylighting all piped segments, fish passage removal. The City/Parks will be responsible for paying for restoration. The City/Parks will be responsible for maintenance. The City/Parks must discontinue pesticide, herbicide, fungicide use within 18 months 	<ul style="list-style-type: none"> SPU is planning a project (on Parks property) for 2007 to remove all fish passage barriers and restore open channel segments. Project does not include daylighting piped segments. Project costs are currently estimated at \$4.4 million for this ½ mile of stream segment. Daylighting 3 piped segments of the creek which cross fairways could likely double project costs. Additionally, daylighting would likely interrupt play at critical spots on the course Parks is in the process of developing an IPM program to more environmentally manage its golf courses. That program, however, does not include ultimate elimination of chemical use. Recent City budget cuts have resulted in elimination of the Parks Department's IPM staff position to proactively deal with pesticide, herbicide, fungicide use on its properties. Parks has indicated that in order to completely reduce chemical use its golf courses would need to be rebuilt with better soils/structure.

Table 5
Generalized Fiscal Implications – Summary Table

	Broad Property Effects	Narrow Property Effects
Maximum Costs <u>Assumptions</u> <i>Land set aside requirement - 50%³</i> <i>Costs for restore/daylight – \$6 million per acre or \$137 sq. ft.⁴</i>	\$26.1 Billion in public/private costs * 4,078 years to fund public requirements **	\$24.4 Billion in public/private costs * 4,078 years to fund public requirements **
Minimum Costs <u>Assumptions</u> <i>Land set aside requirement – 10%⁵</i> <i>Costs for restore/daylight - \$700,000 per acre or \$16 sq. ft.⁶</i>	\$610 Million in public/private costs * 95 years to fund public requirements **	\$569 Million in public/private costs * 95 years to fund public requirements **

* Note - These generalized cost extrapolations **do not** account for specific costs associated with the Initiative requirements listed below. These requirements would likely add millions to Initiative financial effects under either interpretation.

- City costs associated with creek maintenance;
- Transfer of creek ownership from private to public property;
- City takings compensations;
- City development of a long term creek restoration plan and supplemental Comp Plan EIS;
- City elimination of pesticide, herbicide, fungicide use and related capital improvements (e.g. rebuilding greens at golf course) and staffing increases to support this;
- Code change requirements and staffing associated with implementation of code change and development review requirements;
- Cost to private property owners to meet plan requirements;
- Costs to the City, public properties and private property owners to get an exemption; and
- Indirect economic impacts associated with requirements on Port of Seattle properties and other properties along the Duwamish.

** Note – The total amount of revenue that could be available to fund the public requirements of this Initiative is assumed to be \$5.3 million/year based on: a) maintaining the City’s existing creek restoration program at it current level (an average of \$4 million/year based on 2001-02 expenditures and 03-06 projections); and b) cap on additional revenue that could be incurred on the public at no greater than \$1.3 million/year (or \$5.00/year x 258,499 households)

³The maximum land set aside requirement of 50% is based on a hypothetical restoration scenario where an underground stormwater pipe/creek bisected the length of a 2 acre property (416’ x 208’). To restore a 110’ wide creek (10’ bed and 50’ buffers on each side) along this length the land required would be 45,570 sq feet or 52% of the land area. The figure was rounded downwards. Also, it should be noted that a 10’ creek bed is an extremely conservative width. Most bed sections are likely to be in the range of 15’ to 24’. The smaller the parcel the greater the land set aside requirements under this scenario would be. Generally, the larger the parcel the smaller these requirements under this scenario would be. To cross check this assumption it was compared with the City’s 2001 Northgate Daylighting Scenarios Study prepared by R.W. Beck. The study estimated that the land required for creek daylighting at the Northgate south parking lot was between 3.4 acres to 5.3 acres on 12.5 acres of property translating into a 27% to 42% land set aside requirement.

⁴ Maximum cost assumptions are based on the City’s 2001 Northgate Daylighting Scenario Study prepared by R.W. Beck. The study identified a maximum cost of \$35.9 million to daylight and restore approx 3.4 acres of creek. This translates to \$10.5 million per acre and included acquisition and downstream fish barrier removal. For sake for this analysis, (and since existing open channel creek segments would require only restoration and not daylighting under this Initiative), the number was conservatively rounded downward to \$6 million/acre and assumed to include planning, design and construction costs (but not acquisition and downstream barrier projects). It is worth noting that low end daylighting costs identified by the R.W. Beck study (not including acquisition, downstream barrier removal, planning and design) were in the range of \$1.3 million/acre.

⁵ The minimum land set aside requirement of 10% is based on a hypothetical restoration scenario where an open channel creek lies along half the property line of a ½ acre parcel (104’ x 208’). Restoration is assumed to apply to only half the creek or (55’ wide (a 5’ bed and one 50’ buffer) . The area to be restored would be equal to 2860 sq. ft or 13% of the land area. This figure was rounded downwards. See footnote 3 for cross check on assumptions.

⁶ Minimum cost assumptions are based on the 2001 Thornton Creek Daylighting study prepared for the Thornton Creek Legal Defense Fund by Gaynor and Penhallegon Associates that identified a low end cost of \$2.8 million to daylight and restore at least a 3.8 acre area of creek at the Northgate site. This cost translates to \$736,000/acre and did not include acquisition, planning or design. This number represents a low end “daylighting estimate”. Since existing open channel creek segments would require only restoration and not daylighting under this Initiative, this daylighting estimate was compared with average costs associated with an SPU open channel creek restoration project on Longfellow creek. Project costs were calculated at \$11/ sq foot or \$500,000 per acre. Assuming a mix of open channel and daylighting requirements an average minimum cost figure was set at \$700,000/acre or \$16 sq. ft and was assumed to include planning, design and construction costs. It is worth noting that the upper end daylighting costs identified by the Gaynor and Penhallegon study were in the range of \$1.1 million/acre.

Existing Streams of Seattle

City of Seattle



Legend

- Open Channel
- Drainage Line/Outlet
- Arterial
- State Highway
- Interstate Freeway
- Park



0 0.5 1 Miles

0 4000 Feet

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November 27, 2002

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Historic Streams of Seattle

City of Seattle



Legend

- Historic Stream
- Arterial
- State Highway
- Interstate Freeway
- Park



0 0.5 1 Miles

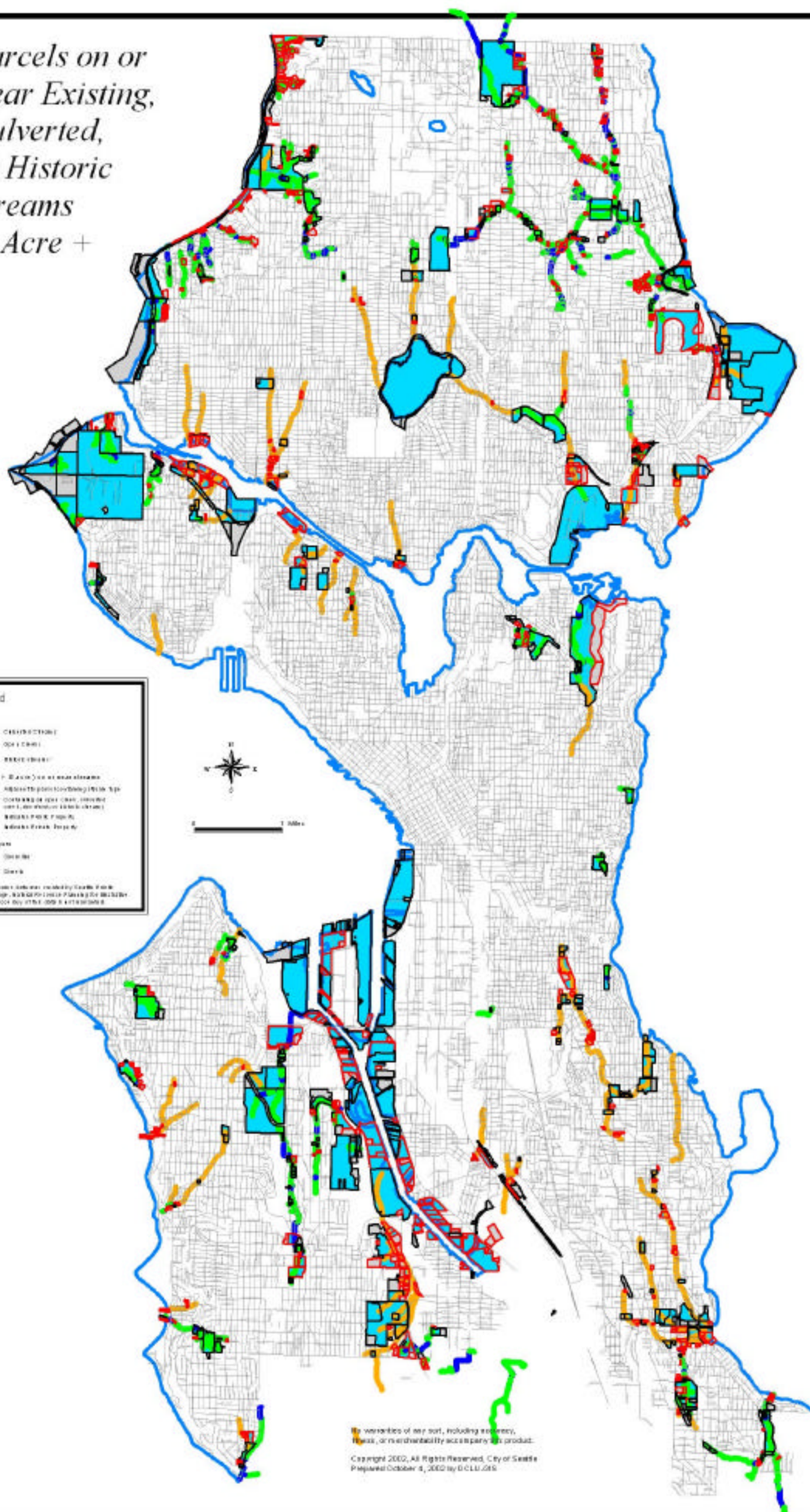
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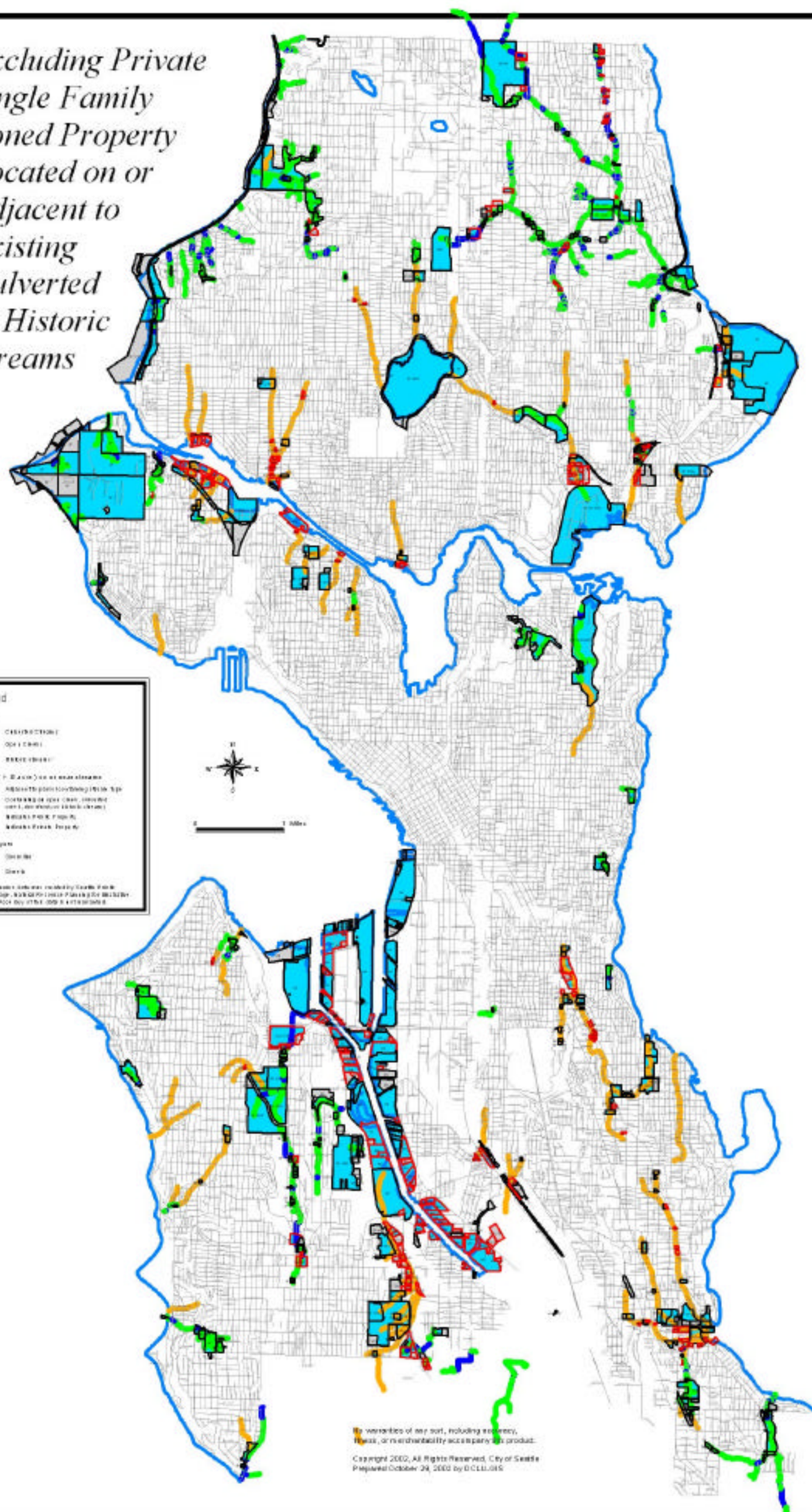
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*Parcels on or Near Existing,
Culverted,
or Historic
Streams
.5 Acre +*



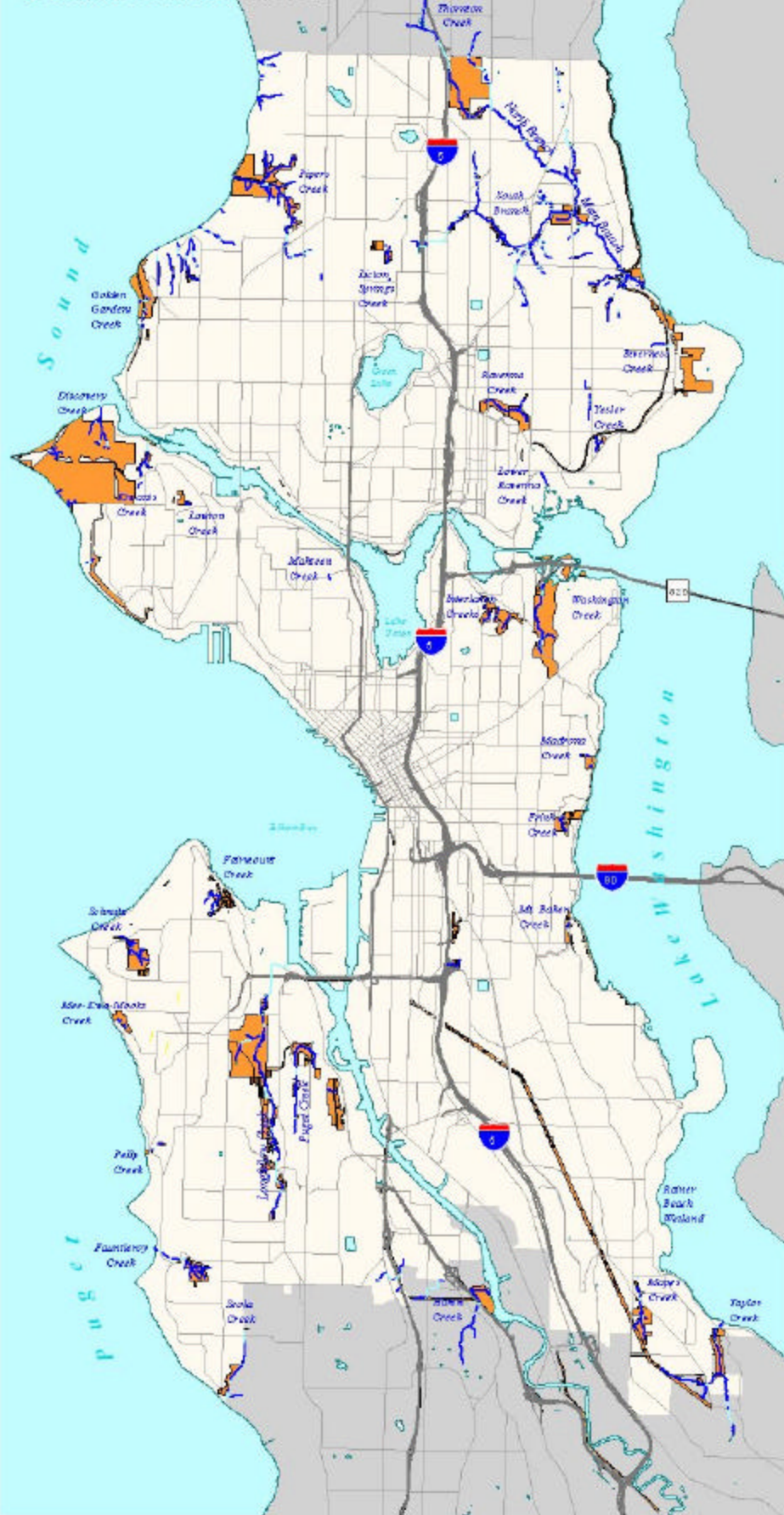
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*Excluding Private
Single Family
Zoned Property
Located on or
Adjacent to
Existing
Culverted
to Historic
Streams*



City Property Within 200 ft. of Existing Seattle Streams

**Seattle
Public
Utilities**



Legend

- Stream
- Drainage Mainline/
Culvert
- Arterial
- State Highway
- Interstate Freeway
- City Property Within
200 ft. of Streams



0 0.5 1 Miles

0 400 Feet

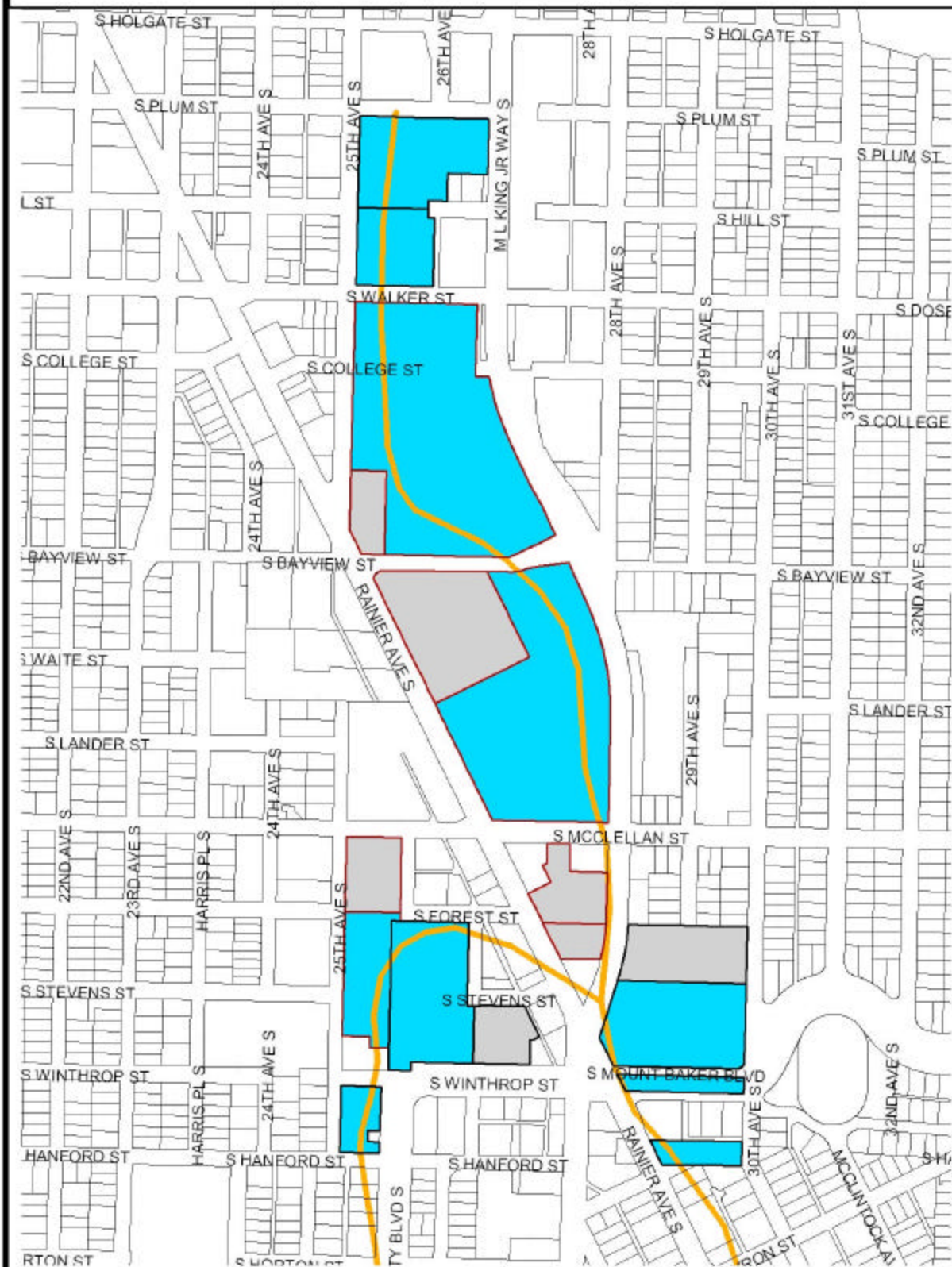
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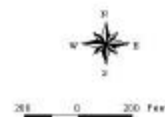
October 7th, 2002

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